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TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 02	STN pricing information for 2008 now available
NEWS	3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN 28	MARPAT searching enhanced
NEWS	6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB 08	STN Express, Version 8.3, now available
NEWS	10	FEB 20	PCI now available as a replacement to DPCI
NEWS	11	FEB 25	IFIREF reloaded with enhancements
NEWS	12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS	15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	16	MAR 31	CA/CAplus and CASREACT patent number format for U.S. applications updated
NEWS	17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS	21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS	22	APR 28	IMSRESEARCH reloaded with enhancements

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 13:11:15 ON 01 MAY 2008

=> file medline caplus embase biosis
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.42       0.42

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=> s (template or target or dna or nucleic) (p) (desalt?) (p) (pcr or amplif)
L1          91 (TEMPLATE OR TARGET OR DNA OR NUCLEIC) (P) (DESALT?) (P) (PCR
               OR AMPLIF)

=> s (template or target or dna or nucleic) (p) (desalt?) (p) (pcr or amplif?) (p)
(filtrat? or exclusion or spin)
L2          12 (TEMPLATE OR TARGET OR DNA OR NUCLEIC) (P) (DESALT?) (P) (PCR
               OR AMPLIF?) (P) (FILTRAT? OR EXCLUSION OR SPIN)

=> dup remove l2
PROCESSING COMPLETED FOR L2
L3           6 DUP REMOVE L2 (6 DUPLICATES REMOVED)

=> d ti 1-6

L3   ANSWER 1 OF 6     MEDLINE on STN                    DUPLICATE 1
TI   Generally applicable methods to purify intracellular coccidia from cell
     cultures and to quantify purification efficacy using quantitative PCR.

L3   ANSWER 2 OF 6     MEDLINE on STN                    DUPLICATE 2
TI   Plastic microchip electrophoresis for genetic screening: the analysis of
     polymerase chain reactions products of fragile X (CGG)n alleles.

L3   ANSWER 3 OF 6  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Electrokinetic sample preparation for the determination of nucleic acids,
     proteins and microorganisms

L3   ANSWER 4 OF 6  BIOSIS  COPYRIGHT (c) 2008 The Thomson Corporation  on STN
TI   Crystal structure of spinach plastocyanin at 1.7 A resolution.

L3   ANSWER 5 OF 6  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Rapid high-throughput purification of genomic DNA from mouse and rat tails
     for use in transgenic testing

L3   ANSWER 6 OF 6  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Automated polymerase chain reaction product sample preparation for
     capillary electrophoresis analysis
```

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=> d bib, kwic 1, 3, 5

L3   ANSWER 1 OF 6     MEDLINE on STN                    DUPLICATE 1
AN   2006041314     MEDLINE
DN   PubMed ID: 16280197
TI   Generally applicable methods to purify intracellular coccidia from cell
     cultures and to quantify purification efficacy using quantitative PCR.
AU   Elsheikha H M; Rosenthal B M; Murphy A J; Dunams D B; Neelis D A;
     Mansfield L S
CS   Department of Large Animal Clinical Sciences, College of Veterinary
     Medicine, Michigan State University, East Lansing, MI 48824, USA..
     elsheik2@msu.edu
SO   Veterinary parasitology, (2006 Feb 18) Vol. 135, No. 3-4, pp. 223-34.
     Electronic Publication: 2005-11-08.
     Journal code: 7602745. ISSN: 0304-4017.
CY   Netherlands
DT   (COMPARATIVE STUDY)
     Journal; Article; (JOURNAL ARTICLE)
     (RESEARCH SUPPORT, NON-U.S. GOV'T)
     (RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)
LA   English
FS   Priority Journals
EM   200606
ED   Entered STN: 24 Jan 2006
     Last Updated on STN: 2 Jun 2006
     Entered Medline: 1 Jun 2006
AB   . . . cultured cells. The efficacy of this purification method was
     assessed by microscopy, SDS-PAGE, Western blotting, immuno-fluorescence,
     and three novel quantitative PCR assays. Culture medium
     containing host cell debris and parasites was eluted through PD-10
     desalting columns. This purification method was compared to
     alternatives employing filtration through a cellulose filter pad
     or filter paper. The estimated recovery of S. neurona merozoites purified
     by the column method. . . purification using a PD-10 column minimized
     parasite loss and the loss of viability as determined by the trypan blue
     dye exclusion assay, the rate of parasite production, and plaque
     forming efficiency in cell culture. Moreover, column-purified parasites
     improved the sensitivity of an immuno-fluorescent (IFA) analysis and
     real-time quantitative PCR assays targeted to parasite 18S
     ribosomal DNA and hsp70 genes. This technique appears generally
     applicable for purifying coccidia grown in cell cultures.

L3   ANSWER 3 OF 6  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   1998:448396  CAPLUS
DN   129:119876
TI   Electrokinetic sample preparation for the determination of nucleic acids,
     proteins and microorganisms
IN   Duerr, Hansjoerg; Brueggemeier, Ulf; Dierksen, Karsten; Hehnen,
     Hans-Robert; Neumann, Rainer; Kuckert, Eberhard
PA   Bayer A.-G., Germany
SO   Ger. Offen., 20 pp.
     CODEN: GWXXBX
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ----------------    ----   --------    --------------------   --------
PI   DE 19700364         A1     19980709    DE 1997-19700364       19970108
     WO 9830571          A1     19980716    WO 1997-EP7306         19971224
         W:  AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
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NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
GA, GN, ML, MR, NE, SN, TD, TG

PI AU 9859857 A 19980803 AU 1998-59857 19971224
EP 958300 A1 19991124 EP 1997-954757 19971224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI
JP 2001509258 T 20010710 JP 1998-530510 19971224
PRAI DE 1997-19700364 A 19970108
WO 1997-EP7306 W 19971224

AB . . . for the isolation and concentration of macromols. from biol. samples by
using a microcapillary electrophoretic system with a built-in size exclusion membrane. Nucleic acids, proteins, viruses, bacteria or fungi are collected and concentrated on a membrane placed in the capillary; they can be. . . detector in the electrophoresis apparatus or they can be used for further anal. or procedures in mass spectroscopy, gel electrophoresis, PCR, transmission electron microscopy, nucleic acid sequencing, immunodiagnosis or hybridization. Following membranes are suitable: polysulfone, polyester, supported polyacrylic acid, polytetrafluorethylene, polyethersulfone, polypropylene, nylon, polycarbonate, and. . . fibers. Up to 400 capillaries can be assembled in a chip module with imbedded membrane. Salt containing samples can be desalted as a first step in a flat channel that is parallel to the microcapillary and the two are connected via a transfer channel; the direction of the elec. potential is switched after desalting and concentration; the macromols. are transferred to the microcapillary. The procedure can be applied in the quality control of biol. prepns., directly in infection diagnosis and in nucleic acid anal. without amplification. Thus model pBr DNA was electrokinetically injected into a coated quartz capillary at 10 kV for 10 s; than -10 kV was applied for 10 min and DNA was concentrated onto the membrane; thereafter the supply container was exchanged for a solution of YOYO, a cationic interchelated dye and -10 kV was maintained for 20 min. The DNA on the membrane was derivatized; after switching the polarity the derivatized DNA was detected at 490 nm.

L3 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1997:541261 CAPLUS
DN 127:145716
TI Rapid high-throughput purification of genomic DNA from mouse and rat tails for use in transgenic testing
AU Schwarz, Holger
CS Abteilung Zellphysiologie, Max-Planck-Inst. Medizinische Forschung, Heidelberg, D-69120, Germany
SO Technical Tips Online [Electronic Publication] (1997) No pp. Given CODEN: TTONFG
URL: http://tto.trends.com/cgi-bin/tto/pr/pg_art.cgi?sid=art.new&ac=t01146|/cgi-bin/tto/pr/pg_new.cgi
PB Elsevier Trends Journals
DT Journal; (online computer file)
LA English
AB The QIAamp 96 spin blood kit (QIAGEN) was modified for simultaneously processing up to 2 X 96 rodent tails in approx. 3 h after. . . mech. treatment of the tissue is necessary and no hazardous reagents like phenol are required. The use of a fixed DNA-binding matrix prevents carry over of DNA-binding particles, and the 96-well format reduces handling time dramatically. Further more, the eluted DNA is ready to use, requiring no addnl. concentration and/or

desalting steps for Southern blot anal. or PCR. About 20-60 μg of DNA can be extracted from 0.4-0.6 cm long tail pieces.. The yield may vary depending on species, strain, age and the. .

=> s (template or target or dna or nucleic) (p) (nacl or salt or monovalent) (p) (pcr or amplif?) (p) (filtrat? or exclusion or spin)
L4 87 (TEMPLATE OR TARGET OR DNA OR NUCLEIC) (P) (NACL OR SALT OR MONOVALENT) (P) (PCR OR AMPLIF?) (P) (FILTRAT? OR EXCLUSION OR SPIN)

=> dup remove l4
PROCESSING COMPLETED FOR L4
L5 37 DUP REMOVE L4 (50 DUPLICATES REMOVED)

=> s (template or target or dna or nucleic) (p) (nacl or salt or monovalent) (p) (pcr or amplif?) (p) (filtrat? or exclusion or spin) (p) remov?
L6 17 (TEMPLATE OR TARGET OR DNA OR NUCLEIC) (P) (NACL OR SALT OR MONOVALENT) (P) (PCR OR AMPLIF?) (P) (FILTRAT? OR EXCLUSION OR SPIN) (P) REMOV?

=> dup remove l6
PROCESSING COMPLETED FOR L6
L7 9 DUP REMOVE L6 (8 DUPLICATES REMOVED)

=> d ti 1-9

L7 ANSWER 1 OF 9 MEDLINE on STN DUPLICATE 1
TI Improved purification and PCR amplification of DNA from environmental samples.

L7 ANSWER 2 OF 9 MEDLINE on STN DUPLICATE 2
TI Direct extraction of DNA from soils for studies in microbial ecology.

L7 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
TI Test kits for isolation of genomic DNA from blood and bacterial artificial chromosomes from bacterial cultures

L7 ANSWER 4 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
TI A 96-well glass fiber adsorption matrix DNA purification system.

L7 ANSWER 5 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
TI 384-Well PCR template purification and sequencing reaction cleanup prior to loading an ABI 3700 or a MegaBACE 1000 capillary sequencer.

L7 ANSWER 6 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
TI High-throughput purification of BigDye Terminator fluorescent DNA sequencing reactions.

L7 ANSWER 7 OF 9 MEDLINE on STN DUPLICATE 3
TI Evaluation and optimization of DNA extraction and purification procedures for soil and sediment samples.

L7 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
TI Solid-phase reversible immobilization for the isolation of PCR products

L7 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
TI Polymorphism and isomerism in cytidine phosphates

=> d bib, kwic 1-3, 5, 8

L7 ANSWER 1 OF 9 MEDLINE on STN DUPLICATE 1
AN 2007366259 MEDLINE
DN PubMed ID: 17521406
TI Improved purification and PCR amplification of DNA from environmental samples.
AU Arbeli Ziv; Fuentes Cilia L
CS Departamento de Agronomia, Facultad de Agronomia; Universidad Nacional de Colombia--Sede Bogota, Bogota, D.C., Colombia.. aziv@unal.edu.co
SO FEMS microbiology letters, (2007 Jul) Vol. 272, No. 2, pp. 269-75. Electronic Publication: 2007-05-24.
Journal code: 7705721. ISSN: 0378-1097.
CY England: United Kingdom
DT (EVALUATION STUDIES)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LA English
FS Priority Journals
EM 200709
ED Entered STN: 22 Jun 2007
Last Updated on STN: 5 Sep 2007
Entered Medline: 4 Sep 2007
AB Purification and PCR amplification procedures for DNA extracted from environmental samples (soil, compost, and river sediment) were improved by introducing three modifications: precipitation of DNA with 5% polyethylene glycol 8000 (PEG) and 0.6 M NaCl; filtration with a Sepharose 4B-polyvinylpolypyrrolidone (PVPP) spin column; and addition of skim milk (0.3% w/v) to the PCR reaction solution. Humic substances' concentration after precipitation with 5% PEG was 2.57-, 5.3-, and 78.9-fold lower than precipitation with 7.5% PEG, 10% PEG, and isopropanol, respectively. After PEG precipitation, Sepharose, PVPP and the combined (Sepharose-PVPP) column removed 92.3%, 89.5%, and 98%, respectively, of the remaining humic materials. Each of the above-mentioned modifications improved PCR amplification of the 16S rRNA gene. DNA extracted by the proposed protocol is cleaner than DNA extracted by a commercial kit. Nevertheless, the improvement of DNA purification did not improve the detection limit of atrazine degradation gene atzA.

L7 ANSWER 2 OF 9 MEDLINE on STN DUPLICATE 2
AN 2003124405 MEDLINE
DN PubMed ID: 12638659
TI Direct extraction of DNA from soils for studies in microbial ecology.
AU Schneegurt Mark A; Dore Sophia Y; Kulpa Charles F Jr
CS Department of Biological Sciences, Wichita State University, Wichita, KS 67260, USA. mark.schneegurt@wichita.edu
SO Current issues in molecular biology, (2003 Jan) Vol. 5, No. 1, pp. 1-8.
Ref: 45
Journal code: 100931761. ISSN: 1467-3037.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
General Review; (REVIEW)
LA English
FS Priority Journals
EM 200309
ED Entered STN: 18 Mar 2003
Last Updated on STN: 12 Sep 2003
Entered Medline: 11 Sep 2003
AB Molecular analyses for the study of soil microbial communities often depend on the extraction of DNA directly from soils. These

extractions are by no means trivial, being complicated by humic substances that are inhibitory to PCR and restriction enzymes or being too highly colored for blot hybridization protocols. Many different published protocols exist, but none have. . . with relatively harsh cell breakage steps such as bead-beating and freeze-thaw cycles, followed by the addition of detergents and high salt buffers and/or enzymic digestion with lysozyme and proteases. After typical organic extraction and alcohol precipitation, further purification is usually needed to remove inhibitory substances from the extract. The purification steps include size-exclusion chromatography, ion-exchange chromatography, silica gel spin columns, and cesium chloride gradients, among others. A direct DNA extraction protocol is described that has been shown to be effective in a wide variety of soil types. This protocol. . .

L7 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:450263 CAPLUS
DN 137:1485
TI Test kits for isolation of genomic DNA from blood and bacterial artificial chromosomes from bacterial cultures
IN Lienau, E. Kurt; Hurley, J. Michael
PA Eppendorf 5 Prime, Inc., USA
SO U.S. Pat. Appl. Publ., 20 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20020072110	A1	20020613	US 2001-906898	20010716
	US 6548256	B2	20030415		
	US 20030228600	A1	20031211	US 2003-401414	20030328
PRAI	US 2000-218328P	P	20000714		
	US 2001-906898	A2	20010716		

AB A method and kit for isolating high mol. weight nucleic acids from cells with high purity is disclosed, where the nucleic acids are released from the starting material and precipitated onto a trapping membrane. The method and kit may be used in the context of isolating genomic DNA (greater than 20 Kb) from blood and isolating BACs from transformed bacterial cultures. The method includes lysing whole cells in denaturants like chaotropic salts, detergents and proteases in the presence of alcs. like isopropanol, ethanol or methanol to precipitate the DNA. The alc. concentration is preferably between 60-100% (volume/volume) and the detergent concentration is in the range of 1-30% (volume/volume). The precipitated DNA is trapped onto a nylon membrane in a multi-well plate and washed to remove contaminants from the membrane using vacuum filtration. Next, a buffer is added to resuspend the DNA from the filter using vacuum filtration or spin columns and the DNA is resuspended and released from the membrane in less than 10 mins. Alternatively, a second membrane may be linked below. . . glass fiber, treated with an oleophobic coating. This method may be applied to the isolation of genomic, plasmid or cosmid DNA and the isolated DNA may be used for PCR or sequencing anal.

L7 ANSWER 5 OF 9 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 2001:519159 BIOSIS
DN PREV200100519159
TI 384-Well PCR template purification and sequencing reaction cleanup prior to loading an ABI 3700 or a MegaBACE 1000 capillary sequencer.
AU Gabriels, Joe [Reprint author]; LeMaster, Cathie; Miano, Stephanie A.;

Vicaire, Rita; Colman, Michael [Reprint author]; Leonard, Jack T. [Reprint author]
CS Millipore Corporation, Danvers, MA, USA
SO International Genome Sequencing and Analysis Conference, (2000) Vol. 12, pp. 60. print.
Meeting Info.: 12th International Genome Sequencing and Analysis Conference. Miami Beach, Florida, USA. September 12-15, 2000.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
Conference; (Meeting Poster)
LA English
ED Entered STN: 7 Nov 2001
Last Updated on STN: 23 Feb 2002
AB The process of DNA sequencing has changed substantially since the commercialization of capillary sequencing instruments. Capillary electrophoresis, CE, and more specifically, electrokinetic injection, dictates different throughput, cost and purity requirements for template preparation and sequencing reaction cleanup. A flexible and easily automated 384-well device compatible with common liquid handling equipment has been developed specifically for nucleic acid purification before CE. We describe the use of this novel 384-well platform for primer removal from PCR templates and subsequent cleanup of dye terminators and salt from sequencing products prior to loading onto either an ABI 3700 or a MegaBACE 1000 capillary sequencer. This new technology is based on size exclusion and allows the miniaturization of the sequencing reaction while maintaining high recovery and quality of the sequencing products. All sample. . . carried out using vacuum and either a Beckman MultiMek 96-Channel Pipettor or a Cyberlabs 96-pipet automated liquid handling system. Supporting DNA sequencing data from the PE Biosystems ABI 3700 and the APB MegaBACE 1000 capillary electrophoresis sequencers are presented.

L7 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1995:1007258 CAPLUS
DN 124:77645
TI Solid-phase reversible immobilization for the isolation of PCR products
AU DeAngelis, Margaret M.; Wang, David G.; Hawkins, Trevor L.
CS Whitehead Institute/MIT, Center Genome Research, Cambridge, MA, 02139, USA
SO Nucleic Acids Research (1995), 23(22), 4742-3
CODEN: NARHAD; ISSN: 0305-1048
PB Oxford University Press
DT Journal
LA English
AB DNA sequencing directly from PCR products has many advantages over subcloning: the ability to PCR directly from plaques or colonies removes the need for template preparation and is highly amenable to automation. The main problem with this approach is the subsequent purification of the amplified products prior to DNA sequencing. The authors introduce a general method for producing quality DNA sequencing template from PCR products. This procedure is rapid and inexpensive ($0.15 per prepare). The method termed SPRI (solid-phase reversible immobilization) avoids organic extraction, filtration and centrifugation steps. The SPRI method employs a carboxy coated magnetic particle manufactured by PerSeptive Diagnostics, Cambride, MA. (cat no #8-4125). The authors discovered that these particles could reversibly bind DNA in the presence of polyethylene glycol (PEG) and salt. This procedure is amenable to automation, is rapid, and yields double-stranded PCR product suitable for DNA sequencing.

```
=> s (nacl or monovalent) (p) inhibit? (p) (polymerase or taq or pcr)
L8        1106 (NACL OR MONOVALENT) (P) INHIBIT? (P) (POLYMERASE OR TAQ OR PCR)


=> s (nacl or monovalent) (p) inhibit? (p) (polymerase or taq or pcr) (p) (spin or
desalt? or filtrat?)
L9           56 (NACL OR MONOVALENT) (P) INHIBIT? (P) (POLYMERASE OR TAQ OR PCR)
                (P) (SPIN OR DESALT? OR FILTRAT?)

=> dup remove l9
PROCESSING COMPLETED FOR L9
L10          20 DUP REMOVE L9 (36 DUPLICATES REMOVED)

=> d ti 1-20

L10  ANSWER 1 OF 20  BIOSIS  COPYRIGHT (c) 2008 The Thomson Corporation  on STN
TI   Development and evaluation of alternative methods for concentrating
     Norwalk viruses from water.

L10  ANSWER 2 OF 20  BIOSIS  COPYRIGHT (c) 2008 The Thomson Corporation  on STN
TI   INACTINETM PEN110 mechanism of action: Disruption of nucleic acid
     replication.

L10  ANSWER 3 OF 20     MEDLINE on STN                  DUPLICATE 1
TI   Changes in expression of sodium cotransporters and aquaporin-2 during
     ischemia-reperfusion injury in rabbit kidney.

L10  ANSWER 4 OF 20     MEDLINE on STN                  DUPLICATE 2
TI   Evaluation and optimization of DNA extraction and purification procedures
     for soil and sediment samples.

L10  ANSWER 5 OF 20     MEDLINE on STN                  DUPLICATE 3
TI   Purification, characterization and cDNA cloning of an endo-exonuclease
     from the basidiomycete fungus Armillaria mellea.

L10  ANSWER 6 OF 20     MEDLINE on STN                  DUPLICATE 4
TI   Purification and cloning of the GTP cyclohydrolase I feedback regulatory
     protein, GFRP.

L10  ANSWER 7 OF 20     MEDLINE on STN                  DUPLICATE 5
TI   Renin expression in renal proximal tubule.

L10  ANSWER 8 OF 20     MEDLINE on STN                  DUPLICATE 6
TI   Human transcription factor IIIC (TFIIIC). Purification, polypeptide
     structure, and the involvement of thiol groups in specific DNA binding.

L10  ANSWER 9 OF 20     MEDLINE on STN                  DUPLICATE 7
TI   Interactions of the DNA polymerase and gene 4 protein of bacteriophage T7.
     Protein-protein and protein-DNA interactions involved in RNA-primed DNA
     synthesis.

L10  ANSWER 10 OF 20  CAPLUS  COPYRIGHT 2008 ACS on STN
TI   Isolation and partial characterization of chloroplast RNA polymerase from
     pea leaves

L10  ANSWER 11 OF 20     MEDLINE on STN                  DUPLICATE 8
TI   Purification of RNA polymerase and transcription-termination factor Rho
     from Erwinia carotovora.

L10  ANSWER 12 OF 20     MEDLINE on STN                  DUPLICATE 9
TI   [DNA-polymerase from sea urchin (Strongylocentrotus intermedius. Embryos].
     Dnk-polimeraza iz embrionov morskogo ezha Strongylocentrotus intermedius.
```

Ochistka i nekotorye svoistva.

L10 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 10
TI Characterization of a DNA polymerase activity in cultured human melanoma cells that copies poly(2'-O-methylcytidylate)

L10 ANSWER 14 OF 20 MEDLINE on STN DUPLICATE 11
TI Studies on the mode of action of partially thiolated polycytidylic acid (MPC), a novel type of antineoplastic agent.

L10 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 12
TI RNA polymerase from A phytopathogenic bacterium Xanthomonas oryzae (Uyeda et Ishiyama) Dowson

L10 ANSWER 16 OF 20 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
TI A LOW MOLECULAR WEIGHT DNA POLYMERASE EC-2.7.7.7 FROM OVARIES OF THE FROG XENOPUS-LAEVIS DNA POLYMERASE BETA OVARIAN.

L10 ANSWER 17 OF 20 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN DUPLICATE 13
TI Synthesis of ribosomal 5S RNA by isolated nuclei from HeLa cells in vitro.

L10 ANSWER 18 OF 20 MEDLINE on STN DUPLICATE 14
TI DNA polymerase-beta from the nuclear fraction of sea urchin embryos: characterization of the purified enzyme.

L10 ANSWER 19 OF 20 MEDLINE on STN DUPLICATE 15
TI Deoxyribonucleic acid polymerase from the extreme thermophile Thermus aquaticus.

L10 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
TI Evidence for multiple forms of DNA polymerase in Hodgkin's disease

=> d kwic 1-20

L10 ANSWER 1 OF 20 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AB. . . this eluent may not be appropriate for downstream molecular detection methods due to its content, as well as co-concentration of inhibitory substances. Therefore, studies were done on alternative elution media for NV concentration from water. Initial experiments investigated various amino acids. . . an alternative eluent (0.5M L-lysine solution containing 0.1% Triton X-100 (pH 8.5)) for NV recovery from 2-L water volumes by filtration, elution and precipitation using 8% polyethylene glycol (PEG) and 0.1M NaCl. Concentration of NV in filter eluent was also investigated using Centriplus YM-100 microconcentrators (Amicon) having a MWCO of 100,000. NV was quantified in samples using RT-PCR in a 5-tube MPN format. Parallel investigation of NV recovery from seeded drinking water by filtration-elution-precipitation using the lysine and BE eluents indicated no significant difference using either the BE or lysine eluent, although recovery using. . . BE/microconcentrator method also yielded a similar recovery (22%) as the BE/PEG method (27%) in surface water spiked with approximately 450 RT-PCR units of NV. The results of this study indicate that alternative methods and material can be effective for recovering NV. . .

L10 ANSWER 2 OF 20 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AB. . . RBC. PEN110 is a small electrophilic compound with broad-spectrum antiviral (non-enveloped and enveloped) and antibacterial activities and is thought to inhibit replication of infectious organisms by

modification of their genomes. The PEN110 molecule is comprised of two functional domains, a substituted. . . F-tRNA) were incubated with 0.1% (v/v) PEN110 at 23degreeC for 24 h in: 1) MOPS buffer, pH 7.0, 0-500 mM NaCl or KCl; 2) Na-phosphate buffer, pH 6.0-8.0 or 3) MOPS buffer, pH 7.0 containing 25% human CPD/AS-1 supplemented plasma. Aliquots. . . by gel electrophoresis followed by staining with EtBr. For the replication experiment, PEN110-treated ss M13 DNA was purified by gel filtration, annealed to 5'-32P labeled primer and used as a template to DNA polymerase. Primer extension products were analyzed by gel electrophoresis. Incubation with PEN110 caused exposure time, ionic strength and pH dependent fragmentation. . . that guanine is the preferred target base for PEN110's attack on DNA. These results strongly support the proposition that PEN110 inhibits replication of infectious organisms by covalent modification of their genome.

L10 ANSWER 3 OF 20 MEDLINE on STN DUPLICATE 1
AB . . . to 60 min of renal pedicle clamping followed by 24, 48, or 72 h of reperfusion. Urine volume and glomerular filtration rate were markedly decreased, which were accompanied by an increase in serum creatinine level and fraction Na+ excretion. Glucosuria and. . . were persisted to 72 h after reperfusion. The Na+-dependent uptakes of glucose and phosphate by brush border membrane vesicles were inhibited by 24 h of reperfusion. mRNA levels for Na+-glucose, Na+-phosphate, and Na+-succinate cotransporter analyzed by RT-PCR were not changed by 60 min of ischemia alone, but were significantly reduced by 24 h of reperfusion. mRNA levels for apical Na+-K+-2Cl- cotransporter, NaCl cotransporter, and turea transporter in the medulla were not changed during reperfusion. Protein levels for AQP2 in the medulla, but. . .

L10 ANSWER 4 OF 20 MEDLINE on STN DUPLICATE 2
AB . . . nor addition of Chelex 100 resin improved the DNA yields. Bead mill homogenization in a lysis mixture containing chloroform, SDS, NaCl, and phosphate-Tris buffer (pH 8) was found to be the best physical lysis technique when DNA yield and cell lysis. . . We evaluated four different DNA purification methods (silica-based DNA binding, agarose gel electrophoresis, ammonium acetate precipitation, and Sephadex G-200 gel filtration) for DNA recovery and removal of PCR inhibitors from crude extracts. Sephadex G-200 spin column purification was found to be the best method for removing PCR-inhibiting substances while minimizing DNA loss during purification. Our results indicate that for these types of samples, optimum DNA recovery requires. . .

L10 ANSWER 5 OF 20 MEDLINE on STN DUPLICATE 3
AB . . . chromatography. The enzyme had an apparent molecular mass of 17500 Da and was shown to exist as a monomer by gel-filtration analysis. The nuclease was active on both double-stranded and single-stranded DNA but not on RNA. It was optimally active atomic . . degree of thermostability. Three bivalent metal ions, Mg2+, Co2+ and Mn2+, acted as cofactors in the catalysis. It was also inhibited by high salt concentrations: activity was completely abolished at 150 mM NaCl. The nuclease possessed both endonuclease activity on supercoiled DNA and a 3'-5' (but not a 5'-3') exonuclease activity. It generated. . . eight bases. Elucidation of its N-terminal amino acid sequence permitted the cDNA cloning of the A. mellea nuclease via a PCR-based approach. Peptide mapping of the purified enzyme generated patterns consistent with the amino acid sequence coded for by the cloned. . .

L10 ANSWER 6 OF 20 MEDLINE on STN DUPLICATE 4

AB . . . biosynthesis of tetrahydrobiopterin, the cofactor required for aromatic amino acid hydroxylations and nitric oxide synthesis, is sensitive to end-product feedback inhibition by tetrahydrobiopterin. This inhibition by tetrahydrobiopterin is mediated by the GTP cyclohydrolase I feedback regulatory protein GFRP, previously named p35 (Harada, T., Kagamiyama, H., and Hatakeyama, K. (1993) Science 260, 1507-1510), and -phenylalanine specifically reverses the tetrahydrobiopterin-dependent inhibition. As a first step in the investigation of the physiological role of this unique mechanism of regulation, a convenient procedure. . . GTP cyclohydrolase I and GFRP are separately and selectively eluted. GFRP is dissociated from the GTP agarose-bound complex with 0.2 NaCl, a concentration of salt which also effectively blocks the tetrahydrobiopterin-dependent inhibitory activity of GFRP. GTP cyclohydrolase I is then eluted from the GTP-agarose column with GTP. Both GFRP and GTP cyclohydrolase I were then purified separately to near homogeneity by sequential high performance anion exchange and gel filtration chromatography. GFRP was found to have a native molecular mass of 20 kDa and consist of a homodimer of 9.5-kDa. . . obtained from purified GFRP, oligonucleotides were synthesized and used to clone a cDNA from a rat liver cDNA library by polymerase chain reaction-based methods. The cDNA contained an open reading frame that encoded a novel protein of 84 amino acids (calculated. . . mass 9665 daltons). This protein when expressed in Escherichia coli as a thioredoxin fusion protein had tetrahydrobiopterin-dependent GTP cyclohydrolase I inhibitory activity. Northern blot analysis indicated the presence of an 0.8-kilobase GFRP mRNA in most rat tissues, the amounts generally correlating. . .

L10 ANSWER 7 OF 20 MEDLINE on STN DUPLICATE 5
AB . . . describing the presence of renin in the proximal tubule could not distinguish synthesized renin from renin trapped from the glomerular filtrate. In the present study, we examined the presence of renin activity and mRNA in rabbit proximal tubule cells in primary. . . blots under high stringency conditions. In microdissected tubules from normal rats, renin mRNA was not detectable with reverse transcription and polymerase chain reaction. However, in tubules from rats administered the angiotensinogen-converting-enzyme inhibitor, enalapril, renin was easily detected in the S2 segment of the proximal tubule. We postulate the existence of a local. . . that enables the proximal tubule to generate angiotensin II, thereby providing an autocrine system that could locally modulate NaHCO3 and NaCl absorption.

L10 ANSWER 8 OF 20 MEDLINE on STN DUPLICATE 6
AB . . . factor required for the in vitro transcription of 5 S RNA, tRNA, and adenovirus viral-associated (VA) RNA genes by RNA polymerase III. A TFIIIC activity which complemented purified TFIIIB and RNA polymerase III fractions for VA transcription was highly purified from cultured HeLa cells. This activity copurified through all chromatographic procedures, including. . . and Roeder, R.G. (1988) Cell 53, 907-920). Both specific binding activity to the VAI gene and TFIIIC transcription activity were inhibited by the alkylating agents diisopropyl fluorophosphate, N-tosyl-L-phenylalanine chloromethyl ketone (TPCK), and N-ethylmaleimide, and to a lesser extent by N alpha-p-tosyl-L-lysine chloromethyl ketone, whereas neither activity was inhibited by phenylmethylsulfonyl fluoride. These data suggest further that the DNA binding and transcription assays scored the same protein(s). TPCK and. . . specifically cross-linked by UV to a 5-bromo-2-deoxynucleotide-substituted B-block oligodeoxynucleotide. The near identity of the TFIIIC molecular weight determined by gel filtration on SOTA Phase GF 200 (Mr = 140,000) suggests that TFIIIC in solution (in the presence of 0.3 M NaCl at pH 7.0) consists of a single polypeptide which is fairly globular in nature.

L10 ANSWER 9 OF 20 MEDLINE on STN DUPLICATE 7
AB . . . DNA synthesis is conferred by Escherichia coli thioredoxin, a protein that is tightly associated with gene 5 protein. T7 DNA polymerase and gene 4 protein associate to form a complex that can be isolated by filtration through a molecular sieve. The complex is stable in 50 mM NaCl but is dissociated by 100 mM NaCl, a salt concentration that does not inhibit RNA-primed DNA synthesis. T7 DNA polymerase forms a stable complex with single-stranded M13 DNA at 50 mM NaCl as measured by gel filtration, and this complex requires 200 mM NaCl for dissociation, a salt concentration that inhibits RNA-primed DNA synthesis. Gene 4 protein alone does not bind to single-stranded DNA. In the presence of MgCl2 and dTTP or beta, gamma-methylene dTTP, a gene 4 protein-M13 DNA complex that is stable at 200 mM NaCl is formed. The affinity of DNA polymerase for both gene 4 protein and single-stranded DNA leads to the formation of a gene 4 protein-DNA polymerase-M13 DNA complex even in the absence of nucleoside triphosphates. However, the binding of each protein to DNA plays an important role in mediating the interaction of the proteins with each other. High concentrations of single-stranded DNA inhibit RNA-primed DNA synthesis by diluting the amount of proteins bound to each template and reducing the frequency of protein-protein interactions. Preincubation of gene 4 protein, DNA polymerase, and M13 DNA in the presence of dTTP forms protein-DNA complexes that most efficiently catalyze RNA-primed DNA synthesis in the. . .

L10 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
AB RNA polymerase was purified from the chloroplasts of pea leaves. Chloroplasts obtained by d.-gradient centrifugation were lysed by 1% Triton X 100,. . . were centrifuged at 130,000 g for 2 h. The pellet was solubilized in 0.05M Tris-HCl, pH 7.6; 25% glycerol, 0.6M NaCl , 0.01M MgCl2, 2 mM CaCl2, 0.04M β-mercaptoethanol, and DNase (100 μg/mL) and subjected to gel filtration on Sephadex G 100. The sensitivity of the purified enzyme to a series of inhibitors was examined Antibiotics of the rifamycin group (rifamycin SV, rifampicin) and α-amanitin did not inhibit the chloroplast enzyme. Ethidium bromide, actinomycin D, and heparin inhibited the purified RNA polymerase by 80, 88, and 96%, resp.

L10 ANSWER 11 OF 20 MEDLINE on STN DUPLICATE 8
AB Erwinia carotovora RNA polymerase consists of the holoenzyme structure sigma 2 beta beta' sigma as found in Escherichia coli and other bacteria. E. carotovora RNA polymerase can synthesize RNA using lambda, T7 of T4 DNA as templates; however, it is two times less active on these. . . T7 DNA. An additional protein of 115 000 Da molecular mass, termed gamma, is found associated with E. carotovora RNA polymerase. The gamma protein is tightly associated with the polymerase subunits as it is not dissociated by gel filtration in buffer containing 0.5 M NaCl. It can be purified by passing the Agarose 1.5 m enzyme through coupled Bio-Rex 70 and DEAE-cellulose columns. The gamma-protein, when present in excess over the sigma subunit, inhibits holoenzyme activity on T7 DNA but not on poly[d(A-T)]and may thus interfere with sigma activity. The gamma protein by itself. . . indicated by a decrease in RNA synthesis using lambda or T7 DNA as template and E. carotovora or E. coli polymerase as the transcribing-enzyme.

L10 ANSWER 12 OF 20 MEDLINE on STN DUPLICATE 9
AB Using DEAE-cellulose chromatography, three peaks of the DNA-polymerase activity were found in a homogenate of the sea urchin Strongylocentrotus intermedius embryos at stage 32 of the blastomer. The

isolation and purification of DNA-polymerase making up the bulk of he DNA-synthesizing activity of the sea urchin embryo cells included fractionation by ammonium sulfate, chromatography. . . The enzyme activity requires the presence of two-chain DNA activated by pancreatic DNAse, four dNTP and Mg2+. The enzyme is inhibited by a high ionic strength (150 mM KCl or NaCL) and the sulfhydryl reagent--N-ethylmaleimide; the pH optimum is 8.0. The molecular weight of the enzyme as determined by gel-filtration is about 150 000. It is assumed that the enzyme under study can be related to DNA-polymerases of the alpha-type.

L10 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 10
AB While utilizing poly(2'-O-methylcytidylate)·oligodeoxyguanylate [(Cm)n·(dG)12-18] (I) to assay for DNA polymerase activity during fractionation of total cell exts. of cultured human, malignant cells, a new DNA polymerase activity called DNA polymerase Cm (II) was identified in the human melanoma cell line A-375. This activity, which was not associated with particles with. . . thymus DNA 20-, 7-, and 3.5-fold more efficiently than I. II had a sedimentation coefficient of 3.4 S in 0.2M NaCl and a mol. weight of 50,000 as estimated by Sephadex G-100 gel filtration in 0.2M NaCl. With I, III, or IV as template-primer, II had a divalent metal ion optimum of 0.8-1.2 mM MnCl2, was sensitive to inhibition by salt (70-100% at 0.2M NaCl) or N-ethylmaleimide (50% at 0.01 mM), and had a pH optimum of 8.2 in Tris-HCl buffer. It has thus far. . . been unable to copy retrovirus genomic RNA or globin mRNA plus (dT)12-18 with the purified II preparation II was not inhibited by antiserums prepared against either primate retrovirus reverse transcriptase or human cell DNA polymerase-α. In addition to A-375 cells, a cell line established from a human lung carcinoma (A-1188) was found to contain II.. . .

L10 ANSWER 14 OF 20 MEDLINE on STN DUPLICATE 11
AB Partially thiolated polycytidylic acid (MPC), a representative member of the "antitemplate" class of novel chemotherapeutic agents, is a potent inhibitor of the E. coli DNA-dependent RNA polymerase. It inhibited 50% of the enzymic reaction at a concentration of 6 micrometers. Kinetic studies indicated that MPC had no effect on the chain elongation of the transcription process, but it appeared to inhibit the initiation of RNA synthtesis presumably by competing with the DNA template for binding to the RNA polymerase. Binding studies, using a gel filtration method, showed that MPC and the RNA polymerase formed a stable complex which was not dissociated by 0.3 M NaCl. It is inferred that mixed disulfide linkage(s) might have been formed between the enzyme and MPC. The implications of these. . .

L10 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 12
AB DNA-dependent RNA polymerase from X. oryzae, a pathogenic bacterium of rice blight, was purified. The method involved polyethylene glycol precipitation (NH4)2SO4 fractionation, filtration on a Biol-Gel A 1.5 M column, and chromatog. on DEAE-cellulose and DNA-cellulose columns. A 215-fold increase in specific activity was obtained. The subunit structure of the purified X. oryzae RNA polymerase was similar to that from Escherichia coli, but not identical. Throughout, β' and β subunits could not be separated into. . . The mol. wts. of both β and β' were almost identical to that of β subunits of E. coli RNA polymerase. Both σ and α subunits were present;: however, they were all smaller than those of E. coli RNA polymerase. The mol. wts. of the enzyme subunits were β' = 155,000, β = 155,000, σ = 93,000, α = 37,000.. . . 28° and 37° and a pH optimum of 7.8. Mg2+ or Mn2+ was

required for enzyme activity; however, KCl, NH4Cl, NaCl, and (NH4)2SO4 inhibited the enzyme activity. The enzyme was rifampicin-sensitive and transcribed with viral, bacterial, and animal templates.

L10 ANSWER 16 OF 20 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AB A low MW DNA polymerase (DNA nucleotidyltransferase; EC 2.7.7.7) was purified 265,000-fold from ovaries of the frog X. laevis. On polyacrylamide gels run under denaturing. . . . the most purified fraction. The purified activity exhibited a Stokes' radius of 29.5 ± 1 Å, as determined by gel filtration on Sephadex G-100, and a sedimentation coefficient of 3.5 S, determined by zone sedimentation in sucrose gradients. From these parameters. . . . calculated using the Seigel-Monty relationship. The purified activity exhibited an optimum at pH 8.7-9.1 and was stimulated by 0.1 M NaCl, KCl or CsCl. With poly(A) · oligo(dT) templates, the purified activity was absolutely dependent upon Mn2+ ions and was inhibited by Mg2+ ions. Activity with poly(dA) · oligo(dT) and activated DNA templates utilized either Mn2+ or Mg2+ as cofactor. The purified DNA polymerase was inactivated by preincubation with 30 μM p-chloromercuribenzoate, but not by N-ethylmaleimide at concentrations up to 10 mM. Most of the properties of the low MW DNA polymerase purified from ovaries of X. laevis are consistent with the enzyme being a polymerase of the β type.

L10 ANSWER 17 OF 20 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN DUPLICATE 13
AB . . . in nuclei. The synthesis of 5S RNA was dependent on the presence of Mg(2+), while increasing quantities of Mn(2+) progressively inhibited its formation. The most dramatic effect on the amount of 5S RNA synthesized was exerted by the ionic strength of. . . ionic strengths and only 20% or less of the maximal 5S RNA synthesis occurred at 150 to 200 mM for monovalent ions, respectively. At these latter concentrations, bulk RNA synthesis was still very active, indicating a clear dissociation of 5S and. . . bulk RNA syntheses. The synthesis of hybridizable 5S RNA sequences is sensitive to high concentrations of amanitin, demonstrating that RNA polymerase C is responsible for their synthesis. It was shown, however, that conditions for maximal activity of enzyme C in isolated. . . the component which comigrated with mature in vivo 5S RNA hybridized. Moreover, it has been observed by Sephadex G-100 gel filtration that there are no hybridizable 5S sequences in RNA of high molecular weight. Hybridization of in vitro 5S RNA is. . .

L10 ANSWER 18 OF 20 MEDLINE on STN DUPLICATE 14
AB Approximately 2,500-fold purifications of DNA polymerase-beta from the nuclear fraction of blastulae of the sea urchin, Hemicentrotus pulcherrimus, was performed. The enzyme preparation, which was devoid. . . contaminants, showed a sedimentation constant of 3.0 S in a sucrose density gradient, a molecular weight of 50,000 by gel filtration , and an isoelectric point of pH 8.1. The enzyme activity was resistant to sulfhydryl group inhibitors. Its optimal pH was 9.0-9.5 in Tris-maleate buffer and 10.0 in glycine buffer. The optimal NaCl concentration for the activity was 30-60 mM and about half of the activity remained at 0.4 M NaCl. As a template-primer, the enzyme preferred synthetic homopolymers to activated DNA. The order of this preference was as follows; poly. . . (dT)12-18 greater than poly (rA)-oligo (dT)12-18 greater than activated DNA. The above results indicate that the enzyme corresponds to DNA polymerase-beta from vertebrate cells.

L10 ANSWER 19 OF 20 MEDLINE on STN DUPLICATE 15
AB A stable deoxyribonucleic acid (DNA) polymerase (EC 2.7.7.7) with a temperature optimum of 80 degrees C has been purified from the extreme thermophile Thermus aquaticus. The. . . thymus DNA. An absolute requirement for divalent cation cofactor was satisfied by Mg2+ or to a lesser extent by Mn2+. Monovalent cations at concentrations as high as 0.1 M did not show a significant inhibitory effect. The pH optimum was 8.0 in tris(hydroxymethyl)aminomethane-hydrochloride buffer. The molecular weight of the enzyme was estimated by sucrose gradient centrifugation and gel filtrations on Sephadex G-100 to be approximately 63,000 to 68,000. The elevated temperature requirement, small size, and lack of nuclease activity distinguish this polymerase from the DNA polymerase of Escherichia coli.

L10 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2008 ACS on STN
AB The activity of DNA-dependent DNA polymerase was investigated in tissues of patients with Hodgkin's disease. The enzymic activity of the tissues differs, depending on whether or. . . tissues from nodular sclerosis and mixed-cellularity forms of Hodgkin's disease can be distinguished from one another and from human control polymerases by their elution behavior upon DEAE-cellulose chromatog. and Sephadex gel filtration, by the Mg2+ concentration for optimal activity, by the stimulatory or inhibitory effects upon enzymic activity of monovalent cations, and by sensitivity of enzymic activity to heparin inhibition. By these results the concept of heterogeneity in Hodgkin's disease is supported.

=> d bib 4

L10 ANSWER 4 OF 20 MEDLINE on STN DUPLICATE 2
AN 2000011202 MEDLINE
DN PubMed ID: 10543776
TI Evaluation and optimization of DNA extraction and purification procedures for soil and sediment samples.
AU Miller D N; Bryant J E; Madsen E L; Ghiorse W C
CS Section of Microbiology, Division of Biological Sciences, Cornell University, Ithaca, New York 14853-8101, USA.. miller@email.marc.usda.gov
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